## Statement of Considerations

REQUEST BY DEERE & COMPANY FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN RIGHTS IN SUBJECT INVENTIONS MADE IN THE COURSE OF OR UNDER DEPARTMENT OF ENERGY GRANT NO. DE-FG05-97OR22584; DOE WAIVER DOCKET W(A)-97-031 [ORO-670]

Petitioner, Deere & Company, has made a timely request for an advance waiver to worldwide rights in Subject Inventions made in the course of or under Department of Energy (DOE) Grant No. DE-FG05-97OR22584 made to the Gas Research Institute (GRI). Petitioner is a subcontractor to GRI under the grant. The work under this grant calls for the development of technologies to improve natural gas engine efficiencies for automotive markets. Two other companies, Mack Truck and Cummins Engine Company, Inc., are also subcontractors under this project. Cummins Engine Company, Inc. has also submitted an advance waiver request (W(A)-97-036 [ORO 671]) to DOE. This work is sponsored by the Office of Transportation Technologies.

This project began in 1997 and was originally managed by the Trucking Research Institute (TRI). However, in March 1998, TRI underwent a reorganization and the management of this grant and project was transferred to GRI. The DOE funding for the grant for fiscal year 1997 is for \$400,000. It is noted that the DOE share of the research to be performed is matched by substantial other funds. The GRI is providing \$800,000 and the California's South Coast Air Quality Management District is contributing \$400,000. These amounts represent 1997 funding levels and 1998 funding is currently being obtained. Thus while in 1997 the total project funding is \$1.6 million from the above sources, including funding for the other subcontracts, another \$1 to 1.5 million is expected through 1998. These other co-sponsors are willing to allow the Petitioner to have patent rights to inventions developed in the course of the research under the subcontract to Petitioner. The scope of this waiver request is only intended to cover inventions made under Petitioner's subcontract; however, because the majority of this work is being performed by the three subcontractors, inventions are expected to arise only under the subcontracted portion of the work.

The projected total dollar amount of the Petitioner's subcontracted effort is \$1,028,502, with Petitioner cost sharing 40% of this research effort. The period of performance is two years.

Petitioner is a recognized leader in the development of medium and heavy duty diesel and natural gas engines for off-highway applications. Since 1995, Petitioner has been producing a 8.1 liter model of a lean burn compressed natural gas engine for on-highway commercial bus and standard school bus applications and has also developed

a 6.8 liter version. Furthermore, Petitioner holds several patents related to natural gas engines. Therefore, Petitioner's experience and expertise will contribute substantially to commercialization of the inventions made under the subcontract.

Petitioner manufactures approximately 130,000 medium and heavy duty engines each year. About 2/3 of these are used in John Deere farm and industrial equipment and 1/3 are sold to original equipment manufacturers. Considering its market position, it has the capability to commercialize the inventions developed under the subcontract.

Petitioner has invested in excess of \$14 million developing, testing, and bringing new low emission electronically controlled compressed natural gas engines into the market for heavy duty on-highway applications. This investment by Petitioner continues in both lab and field testing. Furthermore, assuming successful outcome of the proposed effort and if this waiver is granted, Petitioner will invest significant resources to implement these technologies in current and future products.

Petitioner has agreed to the standard DOE waiver terms and conditions, which will be incorporated into its subcontract, including march-in rights, retention of by the government of a license, preference for U.S. industry and U.S. Competitiveness clauses.

Petitioner has agreed that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States, unless the Petitioner can show to the satisfaction of DOE that it is not commercially feasible to do so. In the event DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The Petitioner has further agreed to make the above condition binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees. Should the Petitioner or other such entity receiving rights in any waived invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by DOE.

Granting of the waiver should have little effect on competition since there are several competing technology options to improve the natural gas engine efficiencies, this being one of many previously or yet-to-be developed in the marketplace. Thus, there should not be undue market concentration of Petitioner's products.

Grant of the requested waiver should serve as encouragement to other DOE contractors and subcontractors that significant cost sharing will be recognized as an acceptable consideration for granting greater rights in Subject Inventions.

In view of the substantial level of cost sharing by Petitioner and the objectives and considerations set forth in 10 CFR 784.4, all of which have been considered, it is recommended that the requested waiver for worldwide rights be granted.

Emily G./Schneider
Patent Attorney

Based on the foregoing Statement of Considerations and the representations in the attached Waiver Petition, it is determined that the interests of the United States and the general public will best be served by a waiver of U.S. and foreign patent rights, and therefore, the waiver is granted. This waiver shall not apply to a modification or extension of the cost-shared subcontract where, through such a modification or extension, the purpose, scope or cost of the subcontract has been substantially altered.

CONCURRENCE:

Thomas J. Gross

Thomas J. Gross
Deputy Assistant Secretary for
Transportation Technologies

Date: 11/9/98

APPROVAL:

Paul A. Gottlieb
Assistant General Counsel for
Technology Transfer and
Intellectual Property

Date: 11-13-91

foreign patent application thereon; or (ii) Submits the final report required by paragraph (e)(2)(ii) of this clause, whichever is later.

- (2) However, the Contractor shall not forfeit rights in a subject invention if, within the time specified in paragraph (m)(1) of this clause, the Contractor: (i) Prepares a written decision based upon a review of the record that the invention was neither conceived nor first actually reduced to practice in the course of or under the contract and delivers the decision to Patent Counsel, with a copy to the Contracting Officer; or (ii) Contending that the subject invention is not a subject invention, the Contractor nevertheless discloses the subject invention and all facts pertinent to this contention to the Patent Counsel, with a copy to the Contracting Officer, or (iii) Establishes that the failure to disclose did not result from the Contractor's fault or negligence.
- (3) Pending written assignment of the patent application and patents on a subject invention determined by the Contracting Officer to be forfeited (such determination to be a Final Decision under the Disputes clause of this contract), the Contractor shall be deemed to hold the invention and the patent applications and patents pertaining thereto in trust for the Government. The forfeiture provision of this paragraph shall be in addition to and shall not supersede any other rights and remedies which the Government may have with respect to subject inventions.
- (u) U. S. Competitiveness. The Contractor agrees that any products embodying any waived invention or produced through the use of any waived invention will be manufactured substantially in the United States, unless the Contractor can show to the satisfaction of DOE that it is not commercially feasible to do so. In the event DOE agrees to foreign manufacture, there will be a requirement that the Government's support of the technology be recognized in some appropriate manner, e.g., recoupment of the Government's investment, etc. The Contractor further agrees to make the above condition binding on any assignee or licensee or any entity otherwise acquiring rights to any waived invention, including subsequent assignees or licensees. Should the Contractor or other such entity receiving rights in any waived invention undergo a change in ownership amounting to a controlling interest, then the waiver, assignment, license, or other transfer of rights in the waived invention is suspended until approved in writing by DOE.

(End of clause)